

[ LETTERS TO THE EDITOR ]

**Dementia with Lewy Bodies and Alzheimer's Disease Sometimes Coexist**

**Key words:** Alzheimer's disease, dementia with Lewy bodies

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*To the Editor* I read with interest the article, "Differentiating Dementia with Lewy Bodies from Alzheimer's Disease Using the Fall Risk Evaluation Questionnaire," by Tsujimoto et al. (1). While differentiating dementia with Lewy Bodies (DLB) from Alzheimer's disease (AD) is important, the article does not mention patients with "DLB plus AD".

In clinical practice, for example, a diagnosis of DLB plus AD can be considered when patients with probable DLB show not only DLB features but also memory impairment and medial temporal lobe atrophy at the early stages. Based on international diagnostic guidelines of AD (2), "probable DLB plus possible AD" may be an appropriate diagnosis for such patients.

Currently, it is estimated that over 50% of patients with DLB pathology in the brain also have AD pathology, characterized by neocortical tau and  $\beta$ -amyloid deposition (3). Coexisting AD pathology in patients with DLB may diminish or "Alzheimerize" the clinical expression of DLB (3, 4). A high prevalence of patients with mixed (DLB plus AD) pathology is associated with the fact that A $\beta$  plaques,  $\tau$  tangles, and  $\alpha$ -synuclein interact synergistically to promote

their mutual accumulation (5). Overall, "DLB plus AD" should be included in the differential diagnosis of elderly patients showing cognitive impairment.

**The author states that he has no Conflict of Interest (COI).**

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